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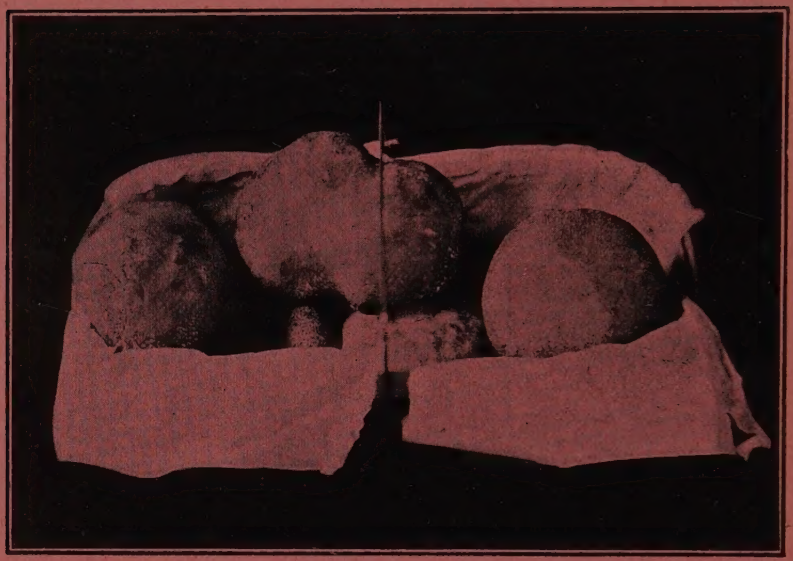

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Mycological Bulletin

Nos. 71-72

W. A. Kellerman, Ph. D., Ohio State University
Columbus, December, 1906.

THE LAST LESSON IN THE BOOK.

What! Have we come to the last lesson in the book! And did you enjoy the Mushrooms? Yes? Well, we will issue another volume of the same kind—only better we hope. More notes and more photos sent by the subscribers will surely be an improvement; and may be our own experience will contribute to slight advancement.

The Frontispiece for Volume IV.—We take pleasure in presenting the portrait of one so eminent as Dr. W. G. Farlow of Harvard University, the professor of cryptogamic botany in that Institution. Well can the portrait grace our fourth volume. Dr. Farlow has been one of the leaders in mycology in this country, and he has done much in advancing our knowledge of Mushrooms.

Editing at a Distance.—On the day this No. reaches the subscribers the editor will set sail for Central America. Therefore from Guatemala again the editorial pen will reach back for issuance of the winter Nos. Every effort will be made to send these out promptly (the first week of each month), and if not well served complaints may be cabled without delay, to a country where nature is kind, where birds sing and flowers blow, a land of sunshine and gladness, where it is summer all winter!

CULTIVATING THE MUSHROOM.

It seems very appropriate to an interest in mycology that this subject should be an important one. We have already issued a "Mushroom No." and desire to call attention to work along the line suggested by the Bulletin from which we quoted so liberally. Profiting by that work started by Dr. Duggar, establishments are now undertaking to furnish pure-culture spawn to customers, and thus one of the sources of embarrassment in growing mushrooms is relegated to a minor place. Without further comment I will quote from a catalog and guide book issued by a reliable firm and leave the matter in the hands of my subscribers who may be interested in this phase of the subject. (And our advertising pages should also be consulted.)

Fig. 217. First testing of Spawn and varieties. (Cut from Pure Culture Spawn Co.)

QUOTATIONS RELATIVE TO PURE CULTURE SPAWN.

"Early in 1904 the work of the Pure Culture Spawn Co. was projected. For some time previous a member of the company had been employed by the U. S. Department of Agriculture to investigate a variety of problems connected with the growing of mushrooms. Every phase of the industry was considered.

"One was to determine what was the best kind of mushroom spawn. All known sorts of spawn from England, France and America were tested. In this spawn test was a new kind, a spawn produced from the tissue of selected mushrooms. The idea was not new, but the application was. No one had ever grown anything but spawn of the ordinary wild field mushrooms. It was thought that spawn grown from selected productive cultivated varieties would make mushroom growing more profitable. It did. Results followed.

The important features of the new spawn were its quick, strong growth, quick fruiting and large mushrooms. Most important of all was the large yields,—two to three times more than any other spawn. The usefulness of such spawn could be easily understood. It remained to simplify the methods by which such spawn could be produced at a reasonable price and still preserve all the advantages of quick growth, quick

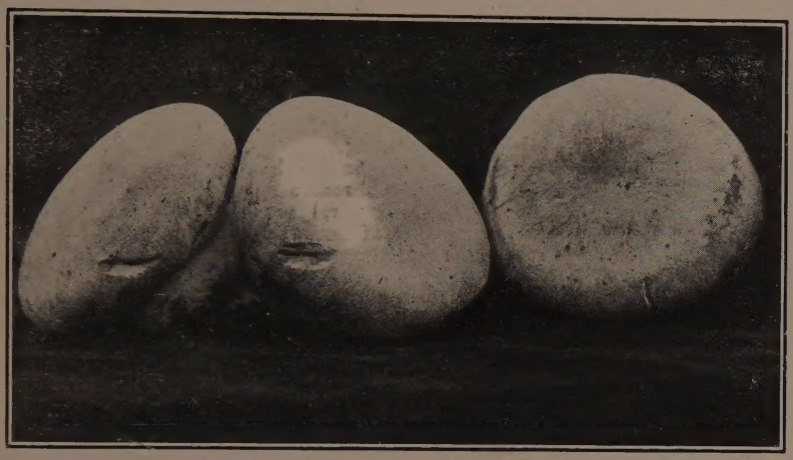

Fig. 218. Weight 25 oz. (Cut from Pure Culture Spawn Co.)

fruiting and large yields. We did it. Not all at one time to be sure, but only after many costly trials and experiments. It was placed on the market as Tissue-Culture Pure Spawn.

"This name tells just what it is. Absolutely pure cultures of mushroom spawn made only from the tissue of selected mushrooms. * * *

"Our spawn has been tested by several experiment stations and the results speak well for it. The Cornell University Agricultural Experiment Station reports over 2 pounds per square foot of bed in about three months from spawning. Referring to the Pure Culture Spawn Company,

Fig. 219. Cut from Pure Culture Spawn Co.

they say: 'It is possible with the method employed by this company to cultivate varieties true to name because the spawn is derived from known varieties, whereas most or all of the imported spawn may contain several varieties mixed.' * * *

"We now offer spawn of five select varieties, all our own introduction. A number of other forms are being tested. The following varieties

represent careful selections from different strains of mushrooms and have been thoroughly tested. * * *

"Success in growing mushrooms is not so much dependent upon long experience as an intelligent study of the conditions. There are three important things to consider:

1. The spawn.
2. The manure and its composting.
3. The temperature of the place in which the beds are made.

"PREPARATION OF COMPOST.—Mushrooms grow naturally in half decayed manure piles. This is the natural soil of the mushroom. The spawn would be killed by the heat of fermentation if placed in a bed of fresh manure. It must undergo a preliminary fermentation. The ma-

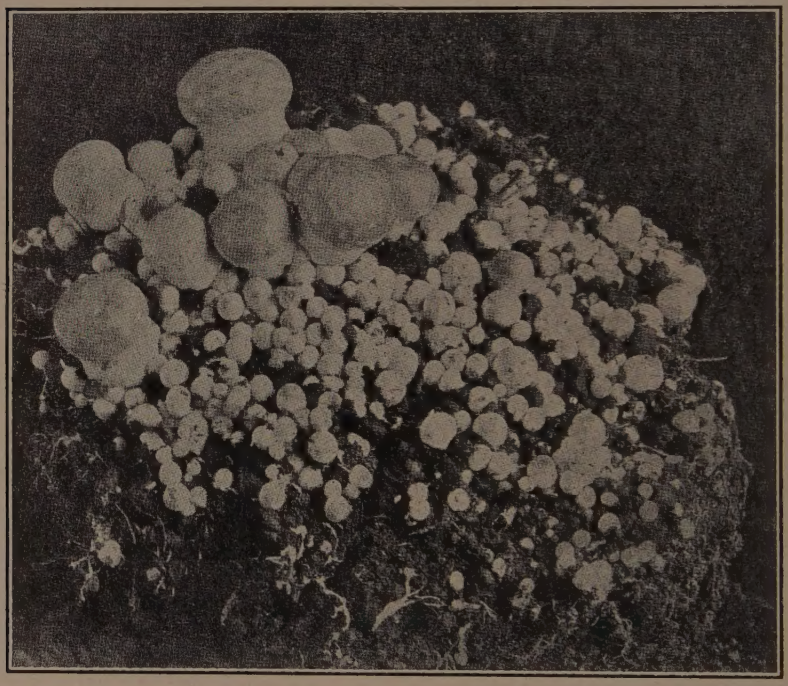

Fig. 220. From Atkinson, cut furnished by Pure Culture Spawn Co.

nure, preferably that from well nourished draft animals with a moderate amount of grain straw or shavings used for bedding (never hay or coarse weeds) should be reasonably fresh to begin with. It will in general not be advisable to use manure that is more than ten days old, unless it has been kept dry and under shelter. If it shows no blackening from fermentation it may be much older. For composting the manure should be placed in ricks. The usual method is to pile down in ricks four to eight feet wide and three to five feet high and as long as may be necessary. As it is piled down in layers it should be well moistened and tramped down. It will begin to ferment immediately, and in one or two days will be quite warm below the surface. This warmth is a result of the fermentation and should continue for some time. The manure may be allowed to ferment in this way for five to eight days when small whitish spots will be observed in the hottest portions. About this time the compost should be given the first turning."

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W. A. Kellerman, Ph. D.

Ohio State University

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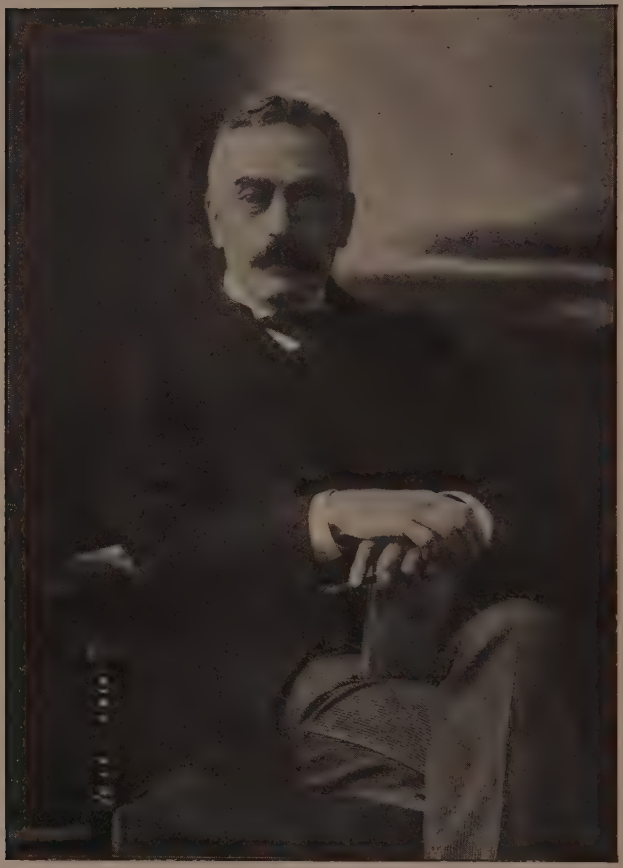

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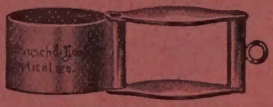

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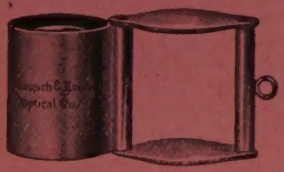

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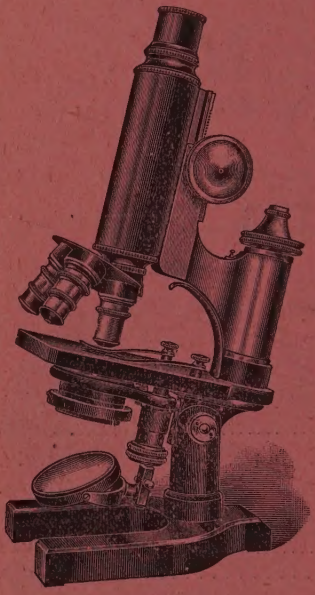

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